WEST

Generate Collection

L5: Entry 106 of 122

File: USPT

Jul 7, 1998

US-PAT-NO: 5777196

DOCUMENT-IDENTIFIER: US 5777196 A

TITLE: Inbred corn plant 01CSI6 and seeds thereof

DATE-ISSUED: July 7, 1998

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Hall; Michael A.

Spencer

ΙA

N/A

N/A

ASSIGNEE INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

TYPE CODE

Dekalb Genetics Corporation

Dekalb IL

N/A

N/A

02

APPL-NO: 8/ 795040

DATE FILED: February 5, 1997

INT-CL: [6] A01H 5/00, A01H 4/00, A01H 1/00, C12N 5/04
US-CL-ISSUED: 800/200; 800/250, 800/DIG.56, 800/205, 435/412, 435/424, 435/430,
435/430.1, 47/58, 47/DIG.1
US-CL-CURRENT: 800/271; 435/412, 435/424, 435/430, 435/430.1, 47/DIG.1, 800/274,
800/275, 800/303, 800/320.1
FIELD-OF-SEARCH: 800/200, 800/205, 800/250, 800/DIG.56, 47/58, 47/DIG.1,
435/172.3, 435/172.1, 435/412, 435/424, 435/430, 435/431.1

REF-CITED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

6040497

AT-NO			
	ISSUE-DATE	PATENTEE-NAME	US-CL
903645	September 1975	Bradner	800/200
368592	January 1983	Welch	47/58
517763	May 1985	Beversdorf et al.	47/58
581847	April 1986	Hibberd et al.	47/58
594810	June 1986	Troyer	47/58
607453	August 1986	Troyer	47/58
526610	December 1986	Sun	800/1
627192	December 1986	Fick	47/58
629819	December 1986	Lindsey	800/1
642411	February 1987	Hibberd et al.	800/1
654465	March 1987	Lindsey	800/1
658084	April 1987	Beversdorf et al.	800/1
558085	April 1987	Beversdorf et al.	800/1
577246	June 1987	Armond et al.	800/1
577246 586319	June 1987 August 1987	Armond et al. Shifriss	800/1 800/1
			•
586319	August 1987	Shifriss	800/1
586319 731499	August 1987 March 1988	Shifriss Puskaric et al.	800/1 800/1
586319 731499 737596	August 1987 March 1988 April 1988	Shifriss Puskaric et al. Seifert et al.	800/1 800/1 800/1
	94810 07453 26610 27192 29819 42411 54465 58084	May 1985 81847 April 1986 94810 June 1986 07453 August 1986 26610 December 1986 27192 December 1986 29819 December 1986 42411 February 1987 54465 March 1987 58084 April 1987	May 1985 Beversdorf et al.

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO PUBN-DATE
0 270 356 February 1987

COUNTRY

EPX

OTHER PUBLICATIONS

Phillips et al. "Cell?Tissue Culture and In vitro manipulation," In Corn and Corn Improvement, 3rd edition, ASA publication 18, p. 358 1988.

Chandler et al., "Two Regulatory Genes of the Maize Anthocyanin Pathway Are Homologous: Isolation of B Utilizing R Genomic Sequences," The Plant Cell, 1:1175-1183, 1989.

Culotta, "How many Genes Had to Change to Produce Corn," Science, 252:1792-1793, 1991.

Duvick, "Genetic Contributions to Yield Gains of U.S. Hybrid Maize, 1930 to 1980," Genetic Contributions to Yield Gains of Five Major Crop Plants: Proceedings of a Symposium sponsored by Div. C-1, Crop Science Society of America, Dec. 2, 1981 in Atlanta, Georgia; W.R. Fehr, Crop Science Society of America and American Society of Agronomy, Madison, Wisconsin, pp. 15-47.

of Agronomy, Madison, Wisconsin, pp. 15-47.

Green & Rhodes, "Plant Regeneration in Tissue Cultures of Maize," Maize for Biological Research, ed. W.F. Sheridan, A Special Publication of the Plant Molecular Biology Association, pp. 367-372, 1982.

Hauptmann et al., "Evaluation of Selectable Markers for Obtaining Stable Transformants in the Gramineae," Plant Physiol., 86:602-606, 1988.

Larson & Hanway, "Corn Production," Corn and Corn Improvement, ed. G.F. Sprague, No. 18 in Agronomy Series, American Society of Agronomy, Inc., Madison, Wisconsin, pp. 625-669, 1977.

Ludwig et al., "A Regulatory Gene as a Novel Visible Marker for Maize Transformation," Science, 247:449-450,1990.

```
Poehlman, Breeding Field Crops, 3rd ed., AVI Publishing Company, Westport,
Connecticut, pp. 469-481, 1987.
Sprague & Eberhart, "Corn Breeding," Corn and Corn Improvements, ed. G.F. Sprague,
No. 18 in Agronomy Series, American Society of Agronomy, Inc., Madison, Wisconsin,
pp. 305-323, 1977.
Troyer, "A Retrospective View of Corn Genetic Resources," Journal of Heredity,
81:17-24, 1990.
Withers & King, "Proline: A Novel Cryoprotectant for the Freeze Preservation of
Cultured Cells of Zea mays L., Plant Physiol., 64:675-578, 1979.
Armstrong & Green, "Establishment and Maintenance of Friable Embryogenic Maize
Callus and the Involvement of L-Proline, Planta, 164:207-214, 1985.
Edallo et al., "Chromosomal Variation and Frequency of Spontaneous Mutation
Associated With in vitro Culture and PLant Regeneration in Maize, "Maydica,
26:39-56, 1981.
Gordon-Kamm et al., "Transformation of Maize Cells and Regeneration of Fertile
Transgenic Plants," The Plant Cell, 2:603-618, 1990.

Green & Phillips, "Plant Regeneration from Tissue Cultures of Maize," Crop
Science, 15:417-421, 1975.
Hallauer et al., "Corn Breeding," Corn and Corn Improvement, eds., Sprague et al.,
Madison, Wisconsin, Ch. 8, pp. 463-564, 1988.

MBS, Inc., Genetics Handbook, 17th ed., MBS, Inc., Ames, Iowa, pp. 3 & 19, 1990.

Meghji et al., "Inbreeding Depression, Inbred and Hybrid Grain Yields, and Other
traits of Maize Genotypes Representing Three Eras, "Crop Science, 24:545-549,1984.
Phillips et al., "Cell/Tissue Culture and in vitro Manipulation," Corn and Corn
Improvement, eds., Sprague et al., Ch. 5, pp. 345-387, 1988.
Rieger et al., Glossary of Genetics and Cytogenetics, Classical and Molecular,
Springer-Verlag, Berlin, p. 116, 1976.
Rhodes et al., Genetically Transformed Maize Plants from Protoplasts, Science,
240:204-207, 1988.
Wright, "Commercial Hybrid Seed," Hybridization of Crop Plants, Fehr et al., eds.
Am. Soc. of agron.-Crop Sci. Soc. of Am., Madison, Wisconsin, Ch. 8, pp. 161-176,
1980.
Wych, "Production of Hybrid Seed Corn," Corn and Corn Improvement, eds., Sprague
et al., Madison, Wisconsin, Ch. 9 pp. 565-607, 1988.
Gerdes and Tracy, "Diversity of Historically Important Sweet Corn Inbredsas
Estimated by RFLP's, Morphology, Isozymes, and Pedigree, "Crop Science,
34(1):26-33, 1994.
Conger et al., "Somatic Embryogenesis from Cultured Leaf Segments of Zea Mays,"
Plant Cell Reports, 6:345-347, 1987.
Duncan et al., "The Production of Callus Capable of Plant Regeneration from
Immature Embryos of Numerous Zea Mays Genotypes, Planta, 165:322-332, 1985.
Fehr (ed.), Principles of Cultivar Development, vol. 1: Theory and Technique, pp.
360-376, 1987.
Gaillard et al., "Optimization of Maize Microspore Isolation and Culture Condition
for Reliable Plant Regeneration, " Plant Cell Reports, 10(2):55, 1991.
Jensen, "Chromosome Doubling Techniques in Haploids," Haploids and Higher
Plants--Advances and Potentials, Proceedings of the First International Symposium,
University of Guelph, Jun. 10-14, 1974.
Nienhuis et al., "Restriction Fragment Length Polymorphism Analysis of Loci
Assosiated with Insect Resistance in Tomato, "Crop Science, 27:797-803, 1987.
Pace et al., "Anther Culture of Maize and the Visualization of Embryogenic
Microspores by Fluorescent Microscopy, "Theoretical and Applied Genetics,
73:863-869, 1987.
Poehlman & Sleper (eds), Breeding Field Crops, 4th Ed., pp. 172-175, 1995.
Rao et al., "Somatic Embryogenesis in Glume Callus Cultures," Maize Genetics
Cooperation Newsletter, vol. 60, 1986.
Songstad et al. "Effect of 1-Aminocyclopropate-1-Carboxylic Acid, Silver Nitrate,
and Norbornadiene on Plant Regeneration from Maize Callus Cultures," Plant Cell
Reports, 7:262-265, 1988.
Stuber et al., "Techniques and scoring procedures for starch gel electrophoresis
of enzymes of maize C. Zea mays, L., "Tech. Bull., N. Carolina Agric. Res. Serv.,
vol. 286, 1988.
Wan et al., "Efficient Production of Doubled Haploid Plants Through Colchicine
Treatment of Anther-Derived Maize Callus, "Theoretical and Applied Genetics,
77:889-892, 1989.
Beckmann and Soller, "Restriction Fragment Length Polymorphisms in Plant Genetic
Improvement, "Oxfors Surveys of Plant Molecular & Cell Biology, 3:196-250, 1986.
Smith and Smith, "Restriction Fragment Length Polymorphisms can Differentiate
```



Among U.S. Maize Hybrids, " Crop Sci., 31:893-899, 1991.

ART-UNIT: 169

PRIMARY-EXAMINER: Benzion; Gary

ATTY-AGENT-FIRM: Arnold, White & Durkee

ABSTRACT:

According to the invention, there is provided an inbred corn plant designated 01CSI6. This invention thus relates to the plants, seeds and tissue cultures of the inbred corn plant 01CSI6, and to methods for producing a corn plant produced by crossing the inbred plant 01CSI6 with itself or with another corn plant, such as another inbred. This invention further relates to corn seeds and plants produced by crossing the inbred plant 01CSI6 with another corn plant, such as another inbred, and to crosses with related species. This invention further relates to the inbred and hybrid genetic complements of the inbred corn plant 01CSI6, and also to the RFLP and genetic isozyme typing profiles of inbred corn plant 01CSI6.

39 Claims, 0 Drawing figures

4 of 4